

The characters of *Amara infima* Dfts. (Col., Carabidae)

door

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When identifying ground beetles (Carabidae) in 1960 it struck me that specimens of *Amara infima* Dfts., caught in the neighbourhood of Wijster, Drente prov. (Holland), did not fit to the descriptions given by GANGLBAUER (1892), EVERTS (1898), SCHAUFUSS (1916), JEANNEL (1942) and CSIKI (1946), since in the male the prosternum is not (or in a few specimens hardly) punctured (126 ♂♂) and in the female the last abdominal sternum is always provided with two (like in the male) instead of four spines (133 ♀♀)*. In the descriptions given by REDTENBACHER (1858), REITTER (1908), KUHN (1913), DAHL (1928) and GERSDORF & KUNTZE (1957) these characters are not mentioned at all.

As especially the number of spines on the last abdominal sternum in males and in females is of great diagnostic value in the genus *Amara* it was necessary to study specimens from other regions, since it might be possible that two species are hidden under the name *Amara infima* Dfts. First of all the specimens of the collection EVERTS (Rijksmuseum van Natuurlijke Historie, Leiden) were studied. In contrast with the description given by EVERTS (1898) all specimens of his collection (48 individuals from different parts of The Netherlands), like specimens from Drente prov., showed an unpunctured (or in a few specimens hardly punctured) prosternum in the male and only two spines on the last abdominal sternum in the female.

As DEJEAN in 1828 described a species *granaria* from Sweden it could be possible that *granaria* Dej. is not a synonym of *infima* Dfts., as is generally accepted. Thus, it was necessary to study specimens from Sweden too. 42 specimens from different parts of Sweden, five specimens from Denmark and one specimen from Finland (Naturhistoriska Museet, Göteborg) were identical with Dutch specimens. Also five specimens from Fontainebleau, France (Muséum National d'Histoire naturelle, Paris) and six specimens from Austria (Naturhistorisches Museum, Wien), the latter of which were compared in the time with the type of DUFTSCHMID, showed the same characters as the Dutch specimens.

We may conclude now, that in contrast with the description of GANGLBAUER (1892), EVERTS (1898), SCHAUFUSS (1916), JEANNEL (1942) and CSIKI (1946) in *Amara infima* Dfts. the male shows an unpunctured (or in a few specimens hardly punctured) prosternum and the female is provided with only two spines (like the male) on the last abdominal sternum. Obviously GANGLBAUER (1892) has been mistaken, either when writing the description of *Amara infima* Dfts., or in studying by accident some aberrant specimens (belonging to another — perhaps unknown — species?). EVERTS (1898) apparently has copied the description of GANGLBAUER (1892) and perhaps some of the other authors (SCHAUFUSS, JEANNEL and CSIKI) too.

*) Some asymmetrical specimens were found. In 3 females the last abdominal sternum was provided with three spines: two at one side and one at the other; in one female the last abdominal sternum was provided with only one spine: only at the left side.

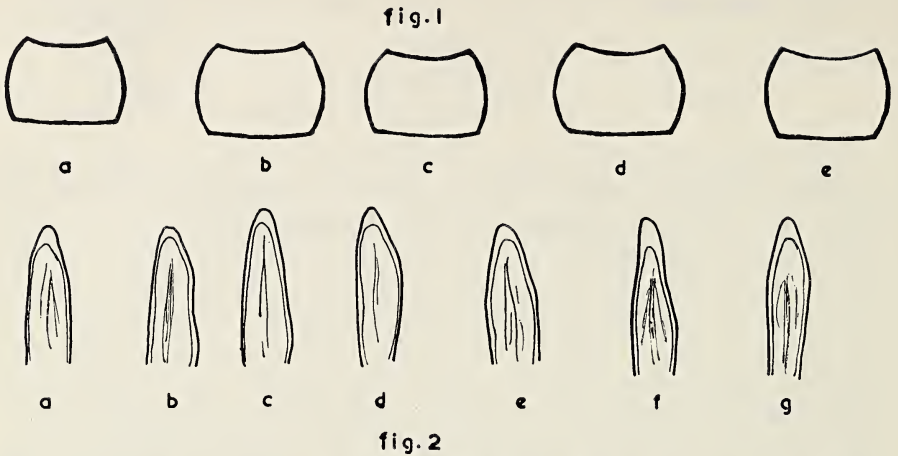


Fig. 1: Shape of the pronotum in specimens of *Amara infima* Dfts. from: a. Wijster (Drente prov., Holland), b. Tilburg (Holland), c. Eerbeek (Holland), d. Austria and e. Fontainebleau (France).

Fig. 2: Shape of the aedeagus in specimens of *Amara infima* Dfts. from: a. and b. Wijster (Drente prov., Holland), c. Nijmegen (Holland), d. Laren (Holland), e. Vlodrop (Holland), f. Austria and g. Fontainebleau (France).

As to other characters of *Amara infima* Dfts. the pronotum varies in shape (fig. 1), some specimens having the sides rather more rounded than others (e.g.: fig. 1, a and 1, b); in some specimens the pronotum is narrower in front than behind (fig. 1, a), in others the pronotum is as wide at the base as in front (fig. 1, e). Some specimens are of a rather narrow shape, others of a much broader shape. Also the shape of the aedeagus varies greatly (fig. 2); only in some specimens the aedeagus resembles the one pictured by JEANNEL (1942, fig. 308, e) (fig. 2, d and 2, g). In all specimens I saw (366) the scutellar stria was nearly or wholly absent.

I wish to thank Mr. G. COLAS (Paris), Dr. F. JANCZYK (Wien), Mr. H. W. WALDEN (Göteborg) and Mr. J. T. WIEBES (Leiden) for kindly sending me specimens of *Amara infima* Dfts.

Summary

In contrast with the descriptions of GANGLBAUER (1892), EVERTS (1898), SCHAUFUSS (1916), JEANNEL (1942) and CSIKI (1946) in *Amara infima* Dfts. the male shows an unpunctured (or in a few specimens a hardly punctured) prosternum and the female is provided with only two spines (like the male) on the last abdominal sternum. The shape of pronotum and aedeagus varies greatly (fig. 1 and 2). Specimens from Holland (307), Sweden (42), Denmark (5), Finland (1), France (5) and Austria (6) were studied.

Literature

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Het enige entomologische artikel in dit deel is de bijdrage van W. L. MEULEMAN en C. P. MEYERS over „het optreden van de spanrups *Ectropis bistortata* (Goeze) op lariks in de staatsbossen te Grollo in de jaren 1958 tot en met 1961" (p. 218—233). Uit de waarnemingen van beide schrijvers blijkt, dat een niet onaanzienlijk percentage van de overwinterende poppen het slachtoffer wordt van muizen en schimmels, terwijl de vogels tal van tegen de boomstammen rustende vlinders en grote aantallen rupsen voor hun rekening nemen. De plaag werd echter volkomen de kop ingedrukt door enkele met name genoemde sluipwespen, zodat de *bistortata*-populatie reeds in 1960 volkomen ingestort was.

Wat de chemische bestrijding betreft, bleken de rupsen vooral gevoelig te zijn voor D.D.T.

Overigens begrijp ik niet, waarom de eveneens gevangen *Oporinia*-soort nog niet definitief gedetermineerd kon worden of hoe de auteurs aanvankelijk konden denken, dat de enorme schade veroorzaakt kon zijn door *Ectropis crepuscularia* (Hb.), een soort, die nog nooit in Nederland is aangetroffen. En dat, terwijl in hetzelfde gebouw te Wageningen een voortreffelijke lepidopteroloog te raadplegen is! — LPK.

XI International Congress of Genetics. Van 2—10 september 1963 zal in Den Haag/Scheveningen het XI International Congress of Genetics worden gehouden. Belangstellenden kunnen zich wenden tot het Secretariaat, Burg. de Monchyplein 14, 's-Gravenhage.

G. L. VAN EYNDOVEN, Secretaris N.E.V.